

GP-304300

IN-MOLD COATING OF POLYMER COMPOSITE PARTS FOR
METALLIZATION AND PAINTING

ABSTRACT OF THE DISCLOSURE

The surface of a molded fiber reinforced polymer matrix article is prepared for subsequent metallization and painting by coating the molded article, preferably while it is still in its mold, with a layer of calcium carbonate-filled, but fiber-free polymer. The calcium carbonate-filled coating is then etched to dissolve particles of calcium carbonate from the surface layer to form fiber-free micro-pores in the surface layer. This porous provides an improved base for the deposition of a metal layer for receiving adherent paint layers and preventing "out-gassing" of the composite body during baking of the paint layers.